

REMARKS

In an Office action, dated November 1, 2005, claims 1-13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Lockhart (U.S. Patent No. 5,678,593) in view of Zeiher et al. (U.S. Patent No. 6,821,428), Lancz (U.S. Patent No. 3,816,351), and Hoots et al. (U.S. Patent No. 6,315,909). A careful review of the cited patents, however, indicates that such do not provide a legitimate basis for the rejection of claims 1-13. Accordingly, the Examiner is asked to reconsider claims 1-13.

Claims 1-13 are directed toward a method for dissolving a solid material in a liquid. The claimed method calls for: 1) combining a tracer with a solute in known proportions with the tracer being capable of raising the turbidity of a solvent; 2) providing a container for receiving the mixture and a solvent; 3) introducing the solvent and the mixture into the container; and, 4) stirring the solvent until the turbidity thereof reaches a predetermined level. The result is an uncomplicated method for producing a solvent containing a predetermined concentration of a solute.

The use of the detergent mixing apparatus of Lockhart differs from Applicant's method in that mixing in Lockhart's container 18 is performed either nonstop or on a timed basis, without regard to turbidity, with saturation of a detergent constituent 142 in water being the aim. Furthermore, contrary to the Examiner's statement on page 3 of the action, Lockhart does not put trace solutes into container 18 that are capable of measurement. Rather, chemical supply containers 20, 22, and 24 provide diluted detergent constituents, i.e., trace solutes, to the diluted effluent of container 18. In any event, Lockhart fails to teach the stirring of a solvent in container 18 until any physical property thereof, much less turbidity, reaches a predetermined threshold as is claimed by the Applicant.

The Examiner recognizes that claims 1-7 are not met by Lockhart and, contends that the teachings of Lancz help suggest that claims 1-7 are obvious. Applicant concedes that dyes and "inert fillers" such as sodium sulfate and others suggested by Lancz are well known detergent constituents. However, contrary to the Examiner's contention, sodium sulfate dissolves fully in water, the usual detergent solvent, having no appreciable effect upon water clarity. Furthermore, sodium sulfate does not form "powdery particles in suspension" that "inherently rais[es] the turbidity" of a detergent solution nor does Lancz suggest this. Thus, it appears that the Examiner has improperly made up a teaching used to reject claims 1-13.

The Examiner correctly points out that Zeiher et al. teach the monitoring of industrial processes with tracers, this being a well-known concept. Nonetheless, the tracers taught by Zeiher et al. are fluorescent compounds whose luminous emissions are detected by a fluorometer. With all due respect, nothing in Zeiher et al. regarding fluorescence suggests the use of the cloudiness or turbidity of a solvent containing a turbidity-changing tracer in order to: a) estimate the concentration of another solute in the solvent, and b) control the duration of a process, i.e., stir the solvent until the turbidity of the solvent reaches a predetermined level as the Applicant has claimed.

The Examiner states that Hoots et al. combines tracer monitoring with monitoring of turbidity levels in cooling water systems. Like Zeiher et al., the tracers employed by Hoots et al. are common, fluorescent compounds whose luminous emissions are detected by a fluorometer. Additionally, Hoots et al. consider turbidity merely to be one of about twenty factors that should be considered in judging the operation of a cooling water system along with pH, conductivity, flow rate, and temperature, to name a few. Hoots et al. do not employ turbidity to monitor tracer concentration, contrary to the Examiner's suggestion, or suggest that turbidity can be used in this way.

The Examiner states plainly that Hoots et al. teach light transmission and detection at column 8, lines 15 and 37 and that Zeiher et al. do the same at column 22, lines 29-33. As far as Hoots et al. are concerned, this is patently and inexplicably false. Zeiher et al., however, refer to a fluorometer for detecting fluorescence not a turbidimeter. Further, Zeiher et al. do not refer to directing a beam of light through a solvent to a photodetector as claimed. Thus, the Examiner appears to have improperly made up another prior art teaching for claim rejection purposes, this one being used to reject claims 7, 9 and 11.

The Examiner misstates the teachings of Lockhart with respect to claim 5. Here, the Examiner flips his earlier analysis of column 9, lines 59-62 of Lockhart on its head by stating that these lines disclose the use of plural solvents. (Previously, the Examiner opined that the same lines referenced solutes.) As was noted above, however, chemical supply containers 20, 22 and 24 feed nothing into mixing container 18 but, rather, deliver diluted detergent constituents downstream to the diluted effluent of container 18. The Examiner seems to have generated another, untrue, prior art teaching in his analysis of Applicant's claims.

With a few tweaks being made to the Applicant's claims, it is respectfully submitted that this application is in condition to be passed to issue. If such is not determined to be the case, however, the Examiner is respectfully requested to call the undersigned attorney at the number given below in an effort to satisfactorily conclude the prosecution of this application. Perhaps, one-on-one communication will provide the Examiner with a greater understanding of the claimed method and eliminate any misunderstandings of the Applicant's method.



Respectfully submitted,

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